Grade 4 Session Scripts & Question-by-Question Specifications

Grade 4 Mathematics Session Script

[NOTE: INSTRUCTIONS TO THE ASSESSMENT ADMINISTRATOR ARE IN BOLD CAPITAL LETTERS AND SHOULD NOT BE READ TO THE STUDENTS.]

Introduction

Hello. My name is **(YOUR NAME)**. Today you will be participating in a special study on American education. The study is called the National Assessment of Educational Progress, and it involves thousands of students your age from schools across the country. To make sure that all students receive the same instructions, I will be reading them to you from this script.

The National Assessment of Educational Progress is sponsored by the U.S. government. Its goal is to find out what students your age know and can do in different school subjects. In the next 90 minutes, you will be asked to show how well you can do mathematics. You will also be asked questions about yourself and your school experience.

When the study is over, your answers will be combined with information from other students all over the country. The results will help government leaders, school administrators, and teachers to determine what students are learning. Because the study will have an impact on schools and students all over the country, we hope that you will do the best that you can.

Distribute Materials

Now I would like to give you the things you will be using. Before I hand out your materials, please clear your desks. As I call your name, please come forward to get a booklet and pencil. After you get your booklet, turn it face up on your desk and do not open it until I tell you to. Please do not bend or fold back your booklet at any time. If you need another pencil after we begin, please raise your hand.

READ STUDENTS' NAMES FROM ADMINISTRATION SCHEDULE. DISTRIBUTE BOOKLETS, PENCILS, AND OTHER MATERIALS. RECORD A "\scrtew" OR "A" IN THE "ADMIN. USE ONLY" COLUMN OF THE ADMINISTRATION SCHEDULE. DOUBLE-CHECK THAT EACH STUDENT'S NAME AND BOOKLET ID ON THE ADMINISTRATION SCHEDULE MATCH THOSE ON THE POST-IT AND ON THE BOOKLET. REMOVE THE POST-IT BEFORE GIVING MATERIALS TO STUDENTS.

Some of your booklets have sections where you will need to use a ruler or other materials to answer the questions. If so, remove them now from inside the front cover of your booklet. If you have a packet labeled "G", put it to one side. If you have a packet labeled "X" containing ten numbered squares and a paper strip, remove the set of numbered squares from the packet. (SHOW PACKET AND SET OF SQUARES.) Fold the ten squares along the perforations, and separate them. Then put the squares back into the packet. Now put the materials to one side while we review some instructions.

Calculator Instructions

Now look at the calculator instructions on the back of your booklet. Some of your booklets require using a calculator provided by the National Assessment. I will give some of you calculators to use as we go through these instructions now. Then, the rest of you will get a chance to practice using a calculator.

DISTRIBUTE CALCULATORS TO EVERY OTHER STUDENT. DO NOT ADMIT ANY MORE STUDENTS TO THE SESSION.

There is a picture of the calculator at the bottom of the cover of your booklet to show the location of the buttons you will need to use. **(SHOW LOCATION ON BACK COVER).** If you have used a calculator before, you should find this one easy to use. If you have not used a calculator before, the following directions will be helpful.

1. Turn on the calculator by pressing ON/C. Do not cover the solar cell. You should see a zero. If you do not, raise your hand.

DEMONSTRATE ON POSTER AND SAY:

2. To enter 16: You should push 1, then push 6. You should see 16.

Does everyone have 16 on the calculator? **IF NO**, **REVIEW THE STEPS AGAIN**.

3. Now push ON/C twice. You should see a zero. Pushing the ON/C button twice "clears" or "erases" the numbers you put in the calculator.

DEMONSTRATE ON POSTER AND SAY:

4. To enter one dollar twenty-five cents:

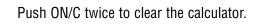
First push 1.

Then press the decimal point.

Then press the 2 and the 5.

You should see 1.25.

Does everyone have 1.25? **IF NO, REVIEW THE STEPS AGAIN.**



DEMONSTRATE ON POSTER AND SAY:

5. To divide 8 by 4:

First press 8.

Then press the division key.

Then press 4, followed by the equals key.

Does everyone have 2? IF NO, REVIEW THE STEPS AGAIN.

Push ON/C twice to clear the calculator.

DEMONSTRATE ON POSTER AND SAY:

6. To compute 42 minus 12:

First press 4 and then 2.

Then press the subtraction or take-away key.

Then press 1 and then 2.

Finally, press the equals key.

Does everyone have 30? IF NO, REVIEW THE STEPS AGAIN.

Always remember to push ON/C twice before you start each problem.

Now give the calculator to the person next to you so he or she can practice using it.

REPEAT CALCULATOR INSTRUCTIONS.

When to Use the Calculator

After the examples, the instructions tell you when to use the calculator. Most of you will be given a calculator to use for at least one part of your booklet. If you are given a calculator, you will have to decide when to use it. For some questions, using the calculator is helpful, but for other questions, the calculator may not be helpful. After each question, you will be asked to indicate whether you used the calculator.

Before we begin, please pass the calculators to the front.

COLLECT CALCULATORS.



Coding the Booklet Cover

WRITE THE SCHOOL'S NAEP ID NUMBER FROM THE ROSTER ON THE CHALKBOARD. Please turn your booklet over. Write this number (REPEAT NUMBER) in the boxes labeled "School number."

WRITE THE TEACHER NAMES AND ID NUMBERS FROM THE ROSTER ON THE CHALKBOARD. Next, write the number of your mathematics teacher in the boxes labeled "Teacher number."

Before we review the directions in the booklet, look at the example question on this poster. Some questions in the assessment, like this one, **(POINT TO POSTER)** may require 5 minutes or more for you to think about and answer. Think carefully about the question and write a complete answer. Be sure to show all of your work. If you have any questions, raise your hand.

Booklet Directions

Now, open your booklet to the directions on the first page. Read them to yourself as I read them out loud.

TURN PAGE, READ DIRECTIONS AND SAMPLE QUESTIONS VERBATIM.

DIRECTIONS

This assessment uses many different booklets. Each booklet has different questions. Do not worry if the person next to you is working on questions that do not look like those you are working on.

Read each question carefully and answer it as well as you can. Do not spend too

much time on any one question.

Each booklet has several parts. You will be helped with the first part and will complete the other parts on your own. You will be told when to begin each part. Stop when you see this sign.



If you finish a part early, you may check your work on that part only. Do not begin another part until you are told to continue.

Now read sample 1. The choices for some questions will be written across the page as shown. Fill in the oval for the best answer.

SAMPLE 1	Almost	Once or twice a	Once or twice a	Never or hardly
How often do you watch movies on TV?	every day	week	month	ever

There is no correct answer to this question. Your answer will tell us how often you watch movies on TV.

Now read sample 2 and write your answer on the blank line below.

SAMPLE 2		
2. What kind of food do you like best?		
(Write in.)		

You should answer this question by writing the kind of food you like best. Sometimes there will be more than one line on which to write your answer. Use as many lines as you need for your answer.

GO ON TO THE NEXT PAGE

Now read sample 3. Fill in the oval beside the choice that you think is correct.

SAMPLE 3

2. How many minutes are there in 1 hour?

12

D 24

© 30

60

You should have filled in the oval for "60" because there are 60 minutes in an hour.

Now read sample 4. For some of the questions you may need to write or draw the answer. You can see how this is done in sample 4.

SAMPLE 4

4. Draw a circle in the space below.



REMEMBER:

Read each question CAREFULLY.

Fill in only ONE OVAL for each question or write your answer in the space provided.

If you change your answer, ERASE your first answer COMPLETELY.

CHECK OVER your work if you finish a section early.





Background Section

Is everyone ready to begin Section 1? I am going to read the questions in Section 1 to you. Listen while I read each question, then answer them in your booklet. Turn the page to the beginning of Section 1, which looks like this.

TURN PAGE AND SHOW SECTION 1. READ QUESTIONS AND ANSWER CHOICES VERBATIM AND SLOWLY.

section 1

SECTION 1

This section has 17 questions. Mark your answers in your booklet. Fill in only one oval for each question.

each q	uestion.	
	TB063001	LC000004
1. Wh	nich best describes you?	 How long have you lived in the United States?
(8)	White (not Hispanic)	All my life
	Black (not Hispanic)	O More than 5 years but not all my
0	Hispanic ("Hispanic" means someone who is from a Mexican,	life
	Mexican American, Chicano, Puerto Rican, Cuban, or other	© 3-5 years
	Spanish or Hispanic background.)	D Less than 3 years
Θ	Asian or Pacific Islander ("Asian or Pacific Islander" means someone	TROGSTOIL
	who is from a Chinese, Japanese, Korean, Filipino, Vietnamese, or other Asian or Pacific Island	4. How often do the people in your home speak a language other than English?
	background.)	Never Never
Φ	American Indian or Alaskan Native ("American Indian or Alaskan	D Sometimes
	Native" means someone who is from one of the American Indian	© Always
	tribes, or one of the original people of Alaska.)	TR000901
Ф	Other (specify)	Does your family get a newspaper regularly?
	TB063101	Yes
	ou are Hispanic, what is your panic background?	® No
	I am not Hispanic.	© I don't know.
Θ	Mexican, Mexican American, or Chicano	Taccorus
0	Puerto Rican	6. Is there an encyclopedia in your home? Yes
	Cuban	® No
Œ	Other Spanish or Hispanic background	© I don't know.

GO ON TO THE NEXT PAGE

SECTION 1

TB000904

- 7. Are there more than 25 books in your home?
 - Yes
 - ® No
 - © I don't know.

TB000905

- 8. Does your family get any magazines regularly?
 - Yes
 - ® No
 - © I don't know.

TB00180

- 9. How much television do you usually watch each day?
 - A None
 - ® 1 hour or less
 - © 2 hours
 - ① 3 hours
 - 4 hours
 - ① 5 hours
 - © 6 hours or more

TB006601

- 10. How much time do you usually spend on homework each day?
 - I don't usually have homework assigned.
 - I have homework but I don't usually do it.
 - © 1/2 hour or less
 - ① 1 hour
 - (E) More than 1 hour

TB001101

- 11. About how many pages a day do you have to read in school and for homework?
 - More than 20
 - **®** 16-20
 - © 11-15
 - **©** 6-10
 - © 5 or fewer

TS004001

- 12. How many days of school did you miss last month?
 - None
 - 1 or 2 days
 - 3 or 4 days
 - ① 5 to 10 days
 - More than 10 days

GO ON TO THE NEXT PAGE

SECTION 1

HE000712

- 13. Within the past two years, how many times have you changed schools because you changed where you lived?
 - None
 - **®** 1
 - © 2
 - © 3 or more

HE000717

- 14. How often do you discuss things you have studied in school with someone at home?
 - Almost every day
 - ® Once or twice a week
 - Once or twice a month
 - Never or hardly ever

HE002795

- 15. How often do you use a computer at home for schoolwork?
 - Almost every day
 - ® Once or twice a week
 - Once or twice a month
 - Never or hardly ever
 - There is no computer at home.

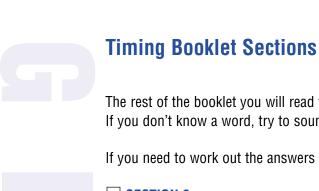
ID110020

- 16. Do you use the Internet at home?
 - Yes
 - ® No

HE002541

- 17. How safe do you feel at school?
 - O Very safe
 - Somewhat safe
 - Somewhat unsafe
 - O Very unsafe





The rest of the booklet you will read to yourself. I cannot answer questions or explain words to you. If you don't know a word, try to sound it out to yourself.

If you need to work out the answers to math problems, you may use the blank spaces in your book.

SECTION 2:

Now turn to the beginning of Section 2. You will have 6 minutes to answer the questions in this section. **SET TIMER FOR 6 MINUTES.** Please begin. **START TIMER.**

AFTER 6 MINUTES, SAY: Please stop.



Look at the beginning of Section 3. If you see the calculator instructions and the statement, "You will need a calculator for this section," raise your hand. **DISTRIBUTE CALCULATORS, CHECKING TO MAKE SURE THAT CORRECT STUDENTS GET CALCULATORS.**

You will have 15 minutes for Section 3. **SET TIMER FOR 15 MINUTES.** Please begin. **START TIMER.**

AFTER 15 MINUTES, SAY: Please stop. If you have a calculator, raise your hand and I will collect it. **COLLECT CALCULATORS.**

SECTION 4:

Look at the beginning of Section 4. If you see the calculator instructions and the statement, "You will need a calculator for this section," raise your hand. **DISTRIBUTE CALCULATORS**.

You will have 15 minutes for Section 4. **SET TIMER FOR 15 MINUTES.** Please begin. **START TIMER.**

AFTER 15 MINUTES, SAY: Please stop. Raise your hand if you have a calculator and I will collect it. **COLLECT CALCULATORS.**

SECTION 5:

Look at the beginning of Section 5. If you see the calculator instructions and the statement, "You will need a calculator for this section," raise your hand. **DISTRIBUTE CALCULATORS**.

You will have 15 minutes for Section 5. **SET TIMER FOR 15 MINUTES.** Please begin. **START TIMER.**

AFTER 15 MINUTES, SAY: Please stop. Raise your hand if you have a calculator and I will collect it. **COLLECT CALCULATORS.**

☐ SECTION 6:

Now turn to the beginning of Section 6. **SET TIMER FOR 2 MINUTES.** You will have 2 minutes for this section. Please begin. **START TIMER.**



Ending the Session

WHEN ALL STUDENTS HAVE FINISHED SECTION 6 BUT AFTER NO MORE THAN 2 MINUTES, SAY: Please stop working and close your booklet. If you have a packet of materials, please place the materials back in the bag. I will collect the booklets, pencils, and materials now. COLLECT BOOKLETS, PENCILS, AND MATERIALS.

THANK STUDENTS AND DISMISS THEM ACCORDING TO SCHOOL POLICY.



[NOTE: INSTRUCTIONS TO THE ASSESSMENT ADMINISTRATOR ARE IN BOLD CAPITAL LETTERS AND SHOULD NOT BE READ TO THE STUDENTS.]

Introduction

Hello. My name is **(YOUR NAME)**. Today you will be participating in an important study on American education. The study is sponsored by the Department of Education of the U.S. government. It is called the National Assessment of Educational Progress and is sometimes called the Nation's Report Card. You may hear about the study on T.V. or read about it in your newspaper. Its goal is to find out what students your age know and can do in different school subjects.

You and your school have been specially selected to be a part of the study. Thousands of other students your age from schools across the country will also be involved. To make sure that all students receive the same instructions, I will be reading the instructions to you from this script. In the next 90 minutes, you will be asked to show how much you know and understand about science. You will also be asked questions about yourself and your school experience.

Your name will not be connected to any of the work you do here today. No one in the school will see your answers, and you will not receive a grade on this work. When the study is over, your answers will be combined with information from other students all over the country. The results will help government leaders, school administrators, and teachers determine what students are learning. Because the study will have an impact on schools and students all over the country, we hope that you will do your very best.

Distribute Materials

Now I would like to give you the materials you will be using. Before I hand these out, please clear your desks. As I call your name, please come forward to get a booklet and pencil. After you get your booklet, remove the yellow Post-it note with your name and place it on one corner of your desk. Then turn the booklet face down on your desk and do not open it until I tell you to. Please do not bend or fold back your booklet at any time. If you need another pencil after we begin, please raise your hand.

CALL STUDENTS' NAMES FROM ADMINISTRATION SCHEDULE, DISTRIBUTE BOOKLETS, PENCILS AND OTHER MATERIALS. RECORD A "~" OR "A" IN THE "ADMIN. USE ONLY" COLUMN OF THE ADMINISTRATION SCHEDULE. DOUBLE-CHECK THAT THE STUDENT'S NAME AND BOOKLET ID ON THE ADMIN. SCHEDULE MATCHES THAT ON THE POST-IT AND ON THE BOOKLET. REMOVE POST-IT BEFORE GIVING MATERIALS TO STUDENTS.



Coding the Booklet Cover

Please turn your booklet over.

WRITE THE SCHOOL'S NAEP ID NUMBER FROM THE ROSTER ON THE CHALKBOARD. Write this number (REPEAT NUMBER) in the boxes labeled "School number."

WRITE THE SCIENCE TEACHER NAMES AND ID NUMBERS FROM THE ROSTER ON THE CHALKBOARD. Next, write the number of your science teacher in the boxes labeled "Teacher number."

Booklet Directions

Now, open your booklet to the directions on the first page which looks like this. **SHOW DIRECTIONS ON THE NEXT PAGE OF THIS SCRIPT.** Read the directions to yourself as I read them out loud.

READ DIRECTIONS, EXAMPLES, AND ANSWERS VERBATIM AND SLOWLY. DO NOT ADMIT ANY MORE STUDENTS TO THE SESSION.

DIRECTIONS

Your book has either 4 or 5 sections. Sections 1 and 2 contain science questions; sections 3 and 4 ask questions about you and your classes. For those of you who have 5 sections, section 5 contains a hands-on science task. The administrator will tell you when to begin each section.

Do not go past the STOP sign at the end of each section until you are told to do so.

If you finish a section before time is called, you may go back and check your work on that section only. Use your time carefully and answer as many questions as you can in each section.

In each of sections 1 and 2, you will have 20 minutes to answer a series of questions about science.

You will be asked to respond to several different types of questions. Some of the questions will require you to choose the best answer and fill in the oval for that answer in your booklet. On questions like this, be sure to mark your answers clearly and darken the oval completely. If you make a mistake or want to change your answer, be sure to erase any unwanted marks. Here is an example of a question that requires you to fill in an oval.

Example 1

James found that certain objects were attracted to a magnet. Which of these objects clung to his magnet?

- Rubber band
- Wooden toothpick
- O Plastic cup
- Steel paper clip

GO ON TO THE NEXT PAGE

For some questions, you will be asked to write short answers on the blank lines provided in your booklet. Here is an example of a question that requires you to provide a short answer.

Example 2

Describe one important difference between plants and animals.

Most plants make their own food, while animals eat plants and other animals for food.

Also, you will be asked to answer some questions by writing longer, more detailed responses. For example, here is a question that requires you to provide a longer answer.

Example 3

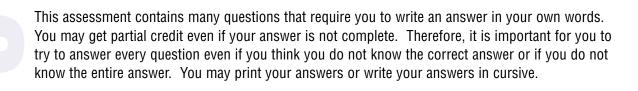
Describe three things that animals do to survive in areas that have cold winters.

Some animals store a lot of fat so that they can go into a deep sleep all winter. Some animals grow a thick coat of fur to keep them warm. Some birds and butterflies fly away from a cold area and spend the winter in a place that is warm and has a lot of food.

When you are asked to write your response be sure that your handwriting is clear. Think carefully about each question and make your answers as complete as possible, using as many lines as you need.

Finally, in some questions you may be asked to draw a diagram or fill in a table.





Timing Booklet Sections

In the first two sections, and in Section 5 for those who have that section, I cannot answer questions or explain words to you.

Remember, I will tell you when to stop work on each section and when to go to the next section.

SECTION 1:

SET TIMER FOR 20 MINUTES. Now, turn the page to the beginning of Section 1. You will have 20 minutes for this section. Carefully read the directions and then begin working. Please begin. **START TIMER.**

MONITOR STUDENTS, MAKING SURE THEY ARE WORKING IN THE CORRECT SECTION OF THEIR BOOKLETS.

AFTER 20 MINUTES, SAY: Please stop.

SECTION 2:

SET TIMER FOR 20 MINUTES. Now turn to Section 2.

You will have 20 minutes for Section 2. Carefully read the directions and then begin working. Please begin. **START TIMER.**

MONITOR STUDENTS, MAKING SURE THEY ARE WORKING IN THE CORRECT SECTION OF THEIR BOOKLETS.

AFTER 20 MINUTES, SAY: Please stop.

■ SECTION 3:

Now, please turn the page to the beginning of Section 3. Read the directions to yourself as I read them aloud.

DIRECTIONS

Sections 3 and 4 consist of background questions. In section 3, you will answer questions about yourself and your education. Read each question carefully and fill in the oval beside the response that is true for you. Please read and answer the following sample question.

How many movies did you see last month on television and in movie theaters?

- None
- 1 to 5
- © 6 to 10
- More than 10

You should have filled in the oval beside the answer that is true for you.

In section 4 you will answer questions about your science instruction. Some questions are like the following example. Please read these two questions and fill in one oval beneath your answer to each question.

	Often	Sometimes	Never
How often do you read about science for fun?	(A)	(1)	©
How often do you work on science projects in school?	(A)	(3)	0

For each of these questions, you should have filled in the oval beneath the answer that is true for you.



The questions in Sections 3 and 4 ask about you, your home, and your school. Your responses to these questions will be kept confidential. No one will know how you answered these questions because your name will not appear on the assessment booklet nor will it be taken out of the school. These questions are being asked so that parents, teachers, administrators, and community leaders can better understand the relationship between students' experiences and how much students have learned. This information will be used to help improve the way students are taught.

The beginning of Section 3 looks like this. **SHOW FIRST PAGE OF SECTION 3 IN THIS SCRIPT.** I am going to read the questions in Section 3 to you. Listen while I read each question, then answer in your booklet.

READ QUESTIONS AND ANSWER CHOICES SLOWLY AND VERBATIM.

SECTION 3

This section has 17 questions. Mark your answers in your booklet. Fill in only one oval for each question.

TB003001

LC000006

- 1. Which best describes you?
 - White (not Hispanic)
 - Black (not Hispanic)
 - Mispanic ("Hispanic" means someone who is from a Mexican, Mexican American, Chicano, Puerto Rican, Cuban, or other Spanish or Hispanic background.)
 - Asian or Pacific Islander ("Asian or Pacific Islander" means someone who is from a Chinese, Japanese, Korean, Filipino, Vietnamese, or other Asian or Pacific Island background.)
 - American Indian or Alaskan Native ("American Indian or Alaskan Native" means someone who is from one of the American Indian tribes, or one of the original people of Alaska.)

Ð	Other	(specify)	
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TB003101

- 2. If you are Hispanic, what is your Hispanic background?
 - I am not Hispanic.
 - Mexican, Mexican American, or Chicano
 Chic
 - O Puerto Rican
 - Cuban
 - Other Spanish or Hispanic background

3. How long have you lived in the United States?

- All my life
- More than 5 years but not all my life
- © 3-5 years
- D Less than 3 years

TB003201

- 4. How often do the people in your home speak a language other than English?
 - Never
 - Sometimes
 - Always

HE002534

- 5. About how many books are in your home?
 - None
 - 1-10 (Few)
 - © 11-25 (Enough to fill one shelf)
 - © 26-100 (Enough to fill one bookcase)
 - More than 100 (Enough to fill several bookcases)

GO ON TO THE NEXT PAGE

Section 3

TB000901

- 6. Does your family get a newspaper regularly?
 - Yes
 - ® No
 - O I don't know.

TB000903

- 7. Is there an encyclopedia in your home?
 - A Yes
 - ® No
 - O I don't know.

TB000905

- 8. Does your family get any magazines regularly?
 - A Yes
 - ® No
 - © I don't know.

TB00180

- 9. On a school day, about how many hours do you usually watch TV or videotapes outside of school hours?
 - None
 - 1 hour or less
 - © 2 hours
 - © 3 hours
 - © 4 hours
 - © 5 hours
 - © 6 hours or more

TB006601

- 10. How much time do you usually spend on homework each day?
 - ② I don't usually have homework assigned.
 - (B) I have homework but I don't usually do it.
 - © 1/2 hour or less
 - ① 1 hour
 - (D) More than 1 hour

QK070706

- 11. How many hours of additional reading do you do each week on your own outside school, NOT in connection with school work?
 - None
 - ® 1-2 hours
 - © 3-4 hours
 - **5-6** hours
 - T-8 hours
 - © 9-10 hours
 - © more than 10 hours

GO ON TO THE NEXT PAGE

TS004001

- 12. How many days of school did you miss last month?
 - None
 - 1 or 2 days
 - © 3 or 4 days
 - ① 5 to 10 days
 - More than 10 days

QK070707

- 13. Since you started first grade, how many times have you changed schools, not counting when you were promoted to the next grade?
 - None
 - **3** 1
 - © 2
 - © 3 or more

HE002540

- 14. How often do you discuss things you have studied in school with someone at home?
 - Almost every day
 - Once or twice a week
 - Once or twice a month
 - Never or hardly ever

HE002795

- 15. How often do you use a computer at home for schoolwork?
 - Almost every day
 - ® Once or twice a week
 - Once or twice a month
 - Never or hardly ever
 - There is no computer at home.

ID110020

- 16. Do you use the Internet at home?
 - Yes
 - No

HE002541

- 17. How safe do you feel at school?
 - Very safe
 - Somewhat safe
 - © Somewhat unsafe
 - O Very unsafe





☐ SECTION 4:

SET TIMER FOR 7 MINUTES. Now turn to the beginning of Section 4. You will have 7 minutes to finish this section. Please begin. **START TIMER.**

AFTER 7 MINUTES, SAY: Please stop.

COLLECT BOOKLETS AND PENCILS, THANK AND DISMISS STUDENTS NOT PARTICIPATING IN HANDS-ON SCIENCE TASK. TO REMAINING STUDENTS, SAY:

Turn to the directions page, which looks like this **(SHOW NEXT PAGE OF SCRIPT)**. Read the directions to yourself as I read them out loud.

TURN PAGE, READ DIRECTIONS SLOWLY AND VERBATIM.

DIRECTIONS

In section 5 you will do a science activity. You will be given a set of materials to use while you do the activity. You will have 30 minutes to do this activity and answer questions about it. The administrator will tell you when to begin the section.



SECTION 5:

Now turn to the beginning of Section 5. I am going to distribute the materials you will need for the next section. After you get your materials, return to your seat and do not begin working until I tell you to. Look at the top of the first page of Section 5. If you see the word "SEEDS," please raise your hand.

DISTRIBUTE "SEEDS" TO ALL STUDENTS WHO HAVE RAISED THEIR HANDS, CHECKING TO MAKE SURE THEY ARE RECEIVING THE CORRECT KIT. CONTINUE DISTRIBUTING THE "UNKNOWN POWDER" AND "MARKERS" KITS.

AFTER ALL KITS HAVE BEEN DISTRIBUTED, READ THE DIRECTIONS BELOW.

Look at the directions on page 1 of Section 5. Read them to yourselves as I read them out loud.

You have been given a bag with some things in it that you will work with during the next 20 minutes. Take all of the things out of the bag and put them on your desk. Now look at the picture below. Do you have everything that is shown in the picture? If you are missing anything, raise your hand and you will be given the things you need.

USE COMPONENTS FROM THE SCIENCE SUPPLEMENTAL MATERIALS KIT TO REPLACE ANY MISSING OR DEFECTIVE PARTS IN STUDENTS' KITS.

Even though the substances you will be using are not hazardous, they are chemicals. You should not taste or smell them. If safety goggles are included in your kit, please put them on before you begin the activity.

Now please turn to page 2 of Section 5 in your booklet. You will have 20 minutes to complete this last section. **SET TIMER FOR 20 MINUTES.** Please begin. **START TIMER.**

AFTER 10 MINUTES, SAY: You have 10 minutes left to work in this section.

AFTER 20 MINUTES, SAY: Please stop. Turn to the last page of Section 5. Follow the instructions in the section labeled "Cleaning Up." Use paper towels to wipe up any spills, set aside any liquid waste materials, and place all kit materials back into the large plastic bag. All of your materials will be collected from you.

COLLECT SCIENCE KITS AND WASTE MATERIALS.

I will collect the booklets and pencils from you now.

COLLECT BOOKLETS AND PENCILS.





Assessment Administrators may answer questions that fourth graders have about the general background questions in Section 1. The questions in Section 1 form an important part of the analysis of results and NAEP wants to obtain the most accurate responses possible.

To assist you in answering students' questions, each question in the background section is repeated below with an explanation of what information the question is attempting to obtain from the students.

If a student feels a question in Section 1 is too personal, stress confidentiality. If that doesn't work, tell the student s/he does not have to answer the question.

Some of the background questions may present difficulty to students who are not living with their mother and father at home. Below are guidelines which can be applied in these situations.

- ★ Questions that refer to mother or father apply to students' natural or adoptive parents or guardians. Answers to questions about newspapers, encyclopedia, etc., should be based on the resources available in the home of their natural or adoptive parents or guardians.
- ★ For students living in **foster homes**, questions which refer to mother or father apply to their foster parents. Answers to questions about newspapers, encyclopedia, etc., should be based on the resources available in the foster home.
- ★ For students living in an **orphanage**, questions which refer to mother or father should not be answered, and it should be noted in the outside margin of the page that the student is living in an orphanage. Answers to questions about newspapers, encyclopedia, etc., should be based on the resources available in the orphanage.

1. Which best describes you?

- A White (not Hispanic)
- B Black (not Hispanic)
- C Hispanic ("Hispanic" means someone who is from a Mexican, Mexican American, Chicano, Puerto Rican, Cuban, or other Spanish or Hispanic background.)
- D Asian or Pacific Islander ("Asian or Pacific Islander" means someone who is from a Chinese, Japanese, Korean, Filipino, Vietnamese, or other Asian or Pacific Island background.)
- E American Indian or Alaskan Native ("American Indian or Alaskan Native" means someone who is from one of the American Indian tribes, or one of the original people of Alaska.)
- F Other (specify)

Help students as much as necessary with this question. Never tell the student his or her race/ethnicity. Help explain the options to the student. The following are guidelines for difficult situations.

- ★ If the student doesn't know race/ethnicity. The AA should ask the student which category best describes the student's background. If the student tells the AA that s/he is a particular group such as "Navajo," "Irish," or "Japanese," the AA may suggest an appropriate response category, e.g., American Indian, White, or Asian.
- ★ If student picks two categories. If a student says that s/he is two categories, perhaps because the mother fits into one category and the father into another, ask the student to try to pick the one category that best describes him or her. If the student cannot decide, have the student fill in the oval next to "Other" and write in two categories. The AA may help the student with spelling.
- ★ If the student says s/he is American. Ask the student that besides being American to select the category that best describes him or her.

The following provides guidance for the response categories.

White: A person having origins in any of the original peoples of Europe (except Spain), North Africa, or the Middle East.

Black: A person having origins in any of the Black peoples of Africa.

Hispanic: A person of Mexican, Puerto Rican, Cuban, Central or South America, or other Spanish (but not Portuguese) culture or origin, regardless of race.

Asian or Pacific Islander: A person having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands. This area includes, for example, China, Japan, Korea, the Philippine Islands, and Samoa.

American Indian or Alaskan Native: A person having origins in any of the original people of North America, and who maintains cultural identification through tribal affiliation or community recognition.

Other: People who identify with more than one of the first five categories or have a background other than the ones listed.



- A I am not Hispanic.
- B Mexican, Mexican American, or Chicano
- C Puerto Rican
- D Cuban
- E Other Spanish or Hispanic background

The following provides some terms used by Hispanics to describe themselves:

- * Mexican, Mexicano, Mexican American, Chicano
- 🖈 Puerto Rican, Puertorrigueno, Boricua
- ★ Cuban, Cubano
- ★ Other Latin American, Latino, Hispanic or Spanish descent

3. How long have you lived in the United States?

- A All my life
- B More than 5 years but not all my life
- C 3-5 years
- D Less than 3 years

At this question we want the student to include only the number of years he or she has lived within the 50 states, the District of Columbia, and U.S. territories. We are interested in the total number of years, whether continuous or not.

4. How often do the people in your home speak a language other than English?

- A Never
- B Sometimes
- C Always

This question focuses on the language used by people in the student's home, excluding the student. It asks how often people in the student's home speak a language <u>other than English</u>, so a student from an <u>English</u>-speaking home should pick the first option, "Never." The student should not count occasional use of another language by someone in his family because that person is practicing a language for school, travel, etc.



- A Yes
- B No
- C I don't know.

Getting a newspaper "regularly" is defined as currently subscribing to a daily newspaper or purchasing a daily newspaper at least 4 or 5 days each week. If the only newspaper published in the area is a weekly, "regularly" is defined as getting it on a subscription basis or purchasing it at least 3 out of every 4 weeks. Newspapers obtained in school are not to be included in this question. Getting only the Sunday paper of a daily paper, even if on a regular basis, does not meet the 4-5 days a week definition of "regularly" and does not qualify as a "Yes" response.

6. Is there an encyclopedia in your home?

- A Yes
- B No
- C I don't know.

An encyclopedia is any reference source of a general nature, either printed or computerized. It does not have to be a whole set of books or more than one volume. A single good comprehensive reference would qualify as a positive response to be counted toward the total. This does not include a dictionary or a world almanac or other yearly publications.

7. Are there more than 25 books in your home?

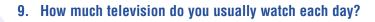
- A Yes
- B No
- C I don't know.

Any book, hard or soft back, that is published as a book will qualify as a "Yes" response. This does not include periodicals, magazines, comic books, etc.

8. Does your family get any magazines regularly?

- A Yes
- B No
- C I don't know.

Getting any magazines "regularly" is defined as currently subscribing to a weekly or monthly magazine or purchasing one "regularly:" that is, 3 out of every 4 weeks if the magazine is a weekly and at least 10 months a year if the magazine is a monthly.



- A None
- B 1 hour or less
- C 2 hours
- D 3 hours
- E 4 hours
- F 5 hours
- G 6 hours or more

This question refers to the average amount of time spent per day watching television programs and watching videocassettes on television outside of school. If the student says the number of hours he or she watches TV varies from day to day, the student should pick an average number of hours a day over any given week.

10. How much time do you usually spend on homework each day?

- A I don't usually have homework assigned.
- B I have homework but I don't usually do it.
- C 1/2 hour or less
- D 1 hour
- E More than 1 hour

This question refers to any time spent on homework, during study hall, during free time at school, at home, etc.

11. About how many pages a day do you have to read in school and for homework?

- A More than 20
- B 16-20
- C 11-15
- D 6-10
- E 5 or fewer

This question refers to the number of pages of reading that is typically assigned each day across all subject areas to be completed in class or as homework.



- A None
- B 1 or 2 days
- C 3 or 4 days
- D 5 to 10 days
- E More than 10 days

This question refers to the number of full days of school the student missed last month for any reason, e.g., illness, skipped, sports event, extracurricular events, family vacation. However, missing school days due to snow or other weather conditions when the school is closed should not be included in the answer to this question. "Last month" is defined as the month prior to the month the student is taking the assessment. For example, if the student is taking the assessment in February, last month refers to January. The student should give his or her "best guess" as to the number of days missed.

13. Within the past two years, how many times have you changed schools because you changed where you lived?

- A None
- B 1
- C 2
- D 3 or more

The purpose of this question is to gauge student mobility. A change in the school that the student attends should be counted only if that change was a result of the student also changing where he/she has lived.

14. How often do you discuss things you have studied in school with someone at home?

- A Almost every day
- B Once or twice a week
- C Once or twice a month
- D Never or hardly ever

This question refers to any kind of discussion that the student has with someone about school work or anything studied in school.



- A Almost every day
- B Once or twice a week
- C Once or twice a month
- D Never or hardly ever
- E There is no computer at home.

This question refers to using a computer at home for any kind of school work. Computers used in schools or libraries should not be included in determining the answer to this question.

16. Do you use the Internet at home?

- A Yes
- B No

Student should answer "Yes" if s/he has access to any dial-up service from a computer at home. Student should answer "No" if computer access at home is confined to use of programs on the home computer (hard, floppy, CD-ROM, or other local drives or any type of local network/LAN, even if these programs were obtained from the Internet via a computer elsewhere. Note that the question asks only about computers in the home, so access to the Internet on a library, school, or other, public computer terminal does not qualify for a "Yes" answer here. Similarly, access at a friend's or relative's home or place of employment does not qualify as a "Yes" answer to this question.

17. How safe do you feel at school?

- A Very safe
- B Somewhat safe
- C Somewhat unsafe
- D Very unsafe

This question refers to feelings regarding physical safety at school. The question is meant to assess feelings about safety in school buildings and on school grounds, and not in neighborhoods surrounding schools.



Assessment Administrators may answer questions that fourth graders have about the general background questions in Section 3. The questions in Section 3 form an important part of the analysis of results and NAEP wants to obtain the most accurate responses possible.

To assist you in answering students' questions, each question in the background section is repeated below with an explanation of what information the question is attempting to obtain from the students.

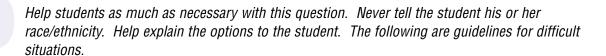
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- ★ If the student doesn't know race/ethnicity. The AA should ask the student which category best describes the student's background. If the student tells the AA that s/he is a particular group such as "Navajo," "Irish," or "Japanese," the AA may suggest an appropriate response category, e.g., American Indian, White, or Asian.
- ★ If student picks two categories. If a student says that s/he is two categories, perhaps because the mother fits into one category and the father into another, ask the student to try to pick the one category that best describes him or her. If the student cannot decide, have the student fill in the oval next to "Other" and write in two categories. The AA may help the student with spelling.
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4. How often do the people in your home speak a language other than English?

- A Never
- **B** Sometimes
- C Always

This question focuses on the language used by people in the student's home, excluding the student. It asks how often people in the student's home speak a language <u>other than English</u>, so a student from an <u>English</u>-speaking home should pick the first option, "Never." The student should not count occasional use of another language by someone in his family because that person is practicing a language for school, travel, etc.



- A None
- B 1–10 (Few)
- C 11–25 (Enough to fill one shelf)
- D 26-100 (Enough to fill one bookcase)
- E More than 100 (Enough to fill several bookcases)

Any book, hard or soft back, that is published as a book will qualify as a "Yes" response. This does not include periodicals, magazines, comic books, etc.

6. Does your family get a newspaper regularly?

- A Yes
- B No
- C I don't know.

Getting a newspaper "regularly" is defined as currently subscribing to a daily newspaper or purchasing a daily newspaper at least 4 or 5 days each week. If the only newspaper published in the area is a weekly, "regularly" is defined as getting it on a subscription basis or purchasing it at least 3 out of every 4 weeks. Newspapers obtained in school are not to be included in this question. Getting only the Sunday paper of a daily paper, even if on a regular basis, does not meet the 4-5 days a week definition of "regularly" and does not qualify as a "Yes" response.

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- A Yes
- B No
- C I don't know.

Getting any magazines "regularly" is defined as currently subscribing to a weekly or monthly magazine or purchasing one "regularly:" that is, 3 out of every 4 weeks if the magazine is a weekly and at least 10 months a year if the magazine is a monthly.

9. On a school day, about how many hours do you usually watch TV or videotapes outside of school hours?

- A None
- B 1 hour or less
- C 2 hours
- D 3 hours
- E 4 hours
- F 5 hours
- G 6 hours or more

This question refers to the average amount of time spent per day watching television programs and watching videocassettes on television outside of school. If the student says the number of hours he or she watches TV varies from day to day, the student should pick an average number of hours a day over any given week.

10. How much time do you usually spend on homework each day?

- A I don't usually have homework assigned.
- B I have homework but I don't usually do it.
- C 1/2 hour or less
- D 1 hour
- E More than 1 hour

This question refers to any time spent on homework, during study hall, during free time at school, at home, etc.



11. How many hours of additional reading do you do each week on your own outside school, NOT in connection with school work?

- A None
- B 1-2 hours
- C 3-4 hours
- D 5-6 hours
- E 7-8 hours
- F 9-10 hours
- G More than 10 hours

This question refers to the number of hours of non-school-related reading a student does each week. For the purposes of this question, "additional reading" includes the reading of books, magazines, newspapers, and other similar materials.

12. How many days of school did you miss last month?

- A None
- B 1 or 2 days
- C 3 or 4 days
- D 5 to 10 days
- E More than 10 days

This question refers to the number of full days of school the student missed last month for any reason, e.g., illness, skipped, sports event, extracurricular events, family vacation. However, missing school days due to snow or other weather conditions when the school is closed should not be included in the answer to this question. Last month is defined as the month prior to the month the student is taking the assessment. For example, if the student is taking the assessment in February, last month refers to January. The student should give his or her "best guess" as to the number of days missed.



- A None
- B 1
- C = 2
- D 3 or more

The purpose of this question is to gauge student mobility. A change in the school that the student attends should be counted only if that change was a result of the student also changing where he/she has lived.

14. How often do you discuss things you have studied in school with someone at home?

- A Almost every day
- B Once or twice a week
- C Once or twice a month
- D Never or hardly ever

This question refers to any kind of discussion that the student has with someone about school work or anything studied in school.

15. How often do you use a computer at home for schoolwork?

- A Almost every day
- B Once or twice a week
- C Once or twice a month
- D Never or hardly ever
- E There is no computer at home.

This question refers to using a computer <u>at home</u> for any kind of schoolwork. Computers used in schools or libraries should not be included in determining the answer to this question.



- A Yes
- B No

Student should answer "Yes" if s/he has access to any dial-up service from a computer at home. Student should answer "No" if computer access at home is confined to use of programs on the home computer (hard, floppy, CD-ROM, or other local drives or any type of local network/LAN), even if these programs were obtained from the Internet via a computer elsewhere. Note that the question asks only about computers in the home, so access to the Internet on a library, school, or other, public computer terminal does not qualify for a "Yes" answer here. Similarly, access at a friend's or relative's home or place of employment is not grounds for an answer of "Yes" to this question.

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